Interview with Rear Admiral Ken Slaght
COMSPAWAR

Rear Adm. Slaght has been the hard-charging, innovative commander of the Space and Naval Warfare Systems Command for the last five years. On the eve of his retirement, Nov. 3, 2005, with 35 years of naval service, CHIPS asked the admiral to talk about some of SPAWAR's initiatives, challenges and triumphs during his command.

CHIPS: What are some of the SPAWAR achievements that you consider most important?

Rear Adm. Slaght: First and foremost has been FORCEnet becoming the central focus of everything we do. We have aligned SPAWAR to ensure we can deliver FORCEnet capability within the Sea Power 21 vision.

We have worked hard to define FORCEnet with our customers, stakeholders, the fleet and industry. The result has been dramatic in a number of areas. We have seen FORCEnet capability pay off in Operation Iraqi Freedom and Operation Enduring Freedom in Afghanistan where it enabled warfighters to conduct their missions much more effectively and efficiently than they have ever been able to do in the past. Everything from putting more Tomahawks on target because of more rapid tasking that came through a FORCEnet system to the ability to prepare and conduct missions collaboratively over FORCEnet systems.

When the former Chief of Naval Operations (CNO), Admiral Vern Clark, visited a couple of years ago, we showed him a capability called 'Composeable FORCEnet' that allowed an operator or commander to reconfigure warfighting capability on the fly. He was impressed, particularly with how the Navy could use it with some of the antisubmarine warfare (ASW) challenges it has in the Pacific fleet. I think the CNO's final comment was, 'We need that and we need it now.' Six months later it was delivered to the CTF 74 Operations Center in the Pacific fleet, ready to start performing a mission. So a capability that was very much needed and delivered in a very rapid cycle is a testament to what SPAWAR has been able to achieve in its focus on FORCEnet.

When the USNS Mercy was called to provide relief in the Far East and other areas hit by the tsunami, she needed to be upgraded with FORCEnet-like capabilities so she could perform command and control missions to support humanitarian assistance. We were able to quickly get her up to speed in support of that mission.

One of the most important areas has been a collaboration process across the Navy and up to the joint world — across all the elements that participate in delivering FORCEnet. Starting with the systems commands and the Program Executive Offices (PEO), there has been a significant effort in what is termed the Virtual SYSCOM to tie together all the elements to create FORCEnet capability. This is one of the things that we have all been very proud of: The ability to collaborate broadly across the systems commands, OPNAV and the fleet to pull together the requirements, the resourcing and the technical solutions that in the end create FORCEnet.

CHIPS: Where do you envision the Virtual SYSCOM heading in the future?

Rear Adm. Slaght: What's really evolved out of the Virtual SYSCOM is that it has become more than just a SYSCOM effort. One of the challenges we realized early on is that unlike building a ship, plane or submarine, this was a much broader exercise and collaboration. As I've said many times, it's an amazing collaborative event when you build a network. I think we can all relate to that when we look back to how the Internet evolved. It was not a single company or entity that created the Internet; it was many entities across academia, industry and government. The result of that collaboration is that there is the amazing capability that we call the Internet.

Truly, when we talk about net-centric operations and net-centric warfare, the key to creating this net-centric capability is the collaboration environment that has to take place. We started the Virtual SYSCOM within a systems commands arena where we were able to collaborate across PEOs and across all the different programs, but then we brought in systems engineers across all the systems commands and started a system of systems.

We've engaged at the SYSCOM commander level, but probably the most important level has been bringing it together under the Assistant Secretary of the Navy Research, Development and Acquisition (ASN (RDA)), Mr. John Young and what he calls his EXCOMs, his executive committees, that bring to the table all the other stakeholders for a given functional area. Mr. Young recognized the power of FORCEnet and stood up a FORCEnet EXCOM. We were able to get OPNAV and the fleet, in the form of the Naval Network Warfare Command, and Secretary Young at the table. Now you have all the parts of the triangle that create capability for the Navy. You have the fleet with its requirements and priorities, you have OPNAV with its resourcing, and then you have the acquisition community and the ability to deliver on the requirement.

The Virtual SYSCOM effort has expanded into almost a Virtual Navy in terms of bringing all the parts that must be brought together to create anything for the Navy: the fleet, OPNAV and the acquisition community. The Virtual SYSCOM will continue to be a broad effort across the Navy as part of Sea Enterprise that really addresses more than just FORCEnet. I think we will start to address more and more of the challenges of Sea Power 21, starting with the pillars — Sea Strike, Sea Basing and Sea Shield — and doing it in the kind of environment that started with FORCEnet.

CHIPS: Can you talk about the synergy between the PEO C4I and Space, PEO Space Systems and the SPAWAR Enterprise?

Rear Adm. Slaght (left) with Vice Adm. James McArthur, Assistant Chief of Naval Operations for Information Technology and Commander, Naval Network Warfare Command at the FORCEnet Engineering Conference, Norfolk, Va., June 28, 2005.

Rear Adm. Slaght: It's been interesting. As you recognized, the stand up of PEO C4I and Space and PEO Space Systems has been relatively new compared to the stand up of the other PEOs in the rest of the Navy and the Department of Defense. We are newcomers and there is some good and bad news attached to that newness. There was certainly some catch up to do, but being newcomers we took a fresh look to how to create the synergy that you mentioned.

It is still a work in progress, but we have started to hit on all the cylinders that will drive FORCEnet. We've done this by creating a connection across the SPAWAR Enterprise that does the filing. When you visualize it, it's like a car radiator where you have elements that go vertical and horizontal across the organization. The vertical elements that we have, which we've always had, are the product lines: communications, sensors, ISR, business systems and so on. The horizontal parts of the radiator chart that support those product lines are where we have created the synergy. Some of those have been the traditional ones like contracting, logistics and legal, but we have added some new critical pieces to be able to create something like FORCEnet.

Systems engineering, for instance, has been integrated horizontally across the enterprise. We use resources in each of the organizational elements to support systems engineering. We have systems engineers from Code 05, the Chief Engineer, the headquarters' piece of SPAWAR, each of the PEOs and systems engineers from each of the specific functional areas in the field to really leverage the size and power of a 7,000-person organization.

In this way, we can take advantage of bringing together all the different levels of systems engineering that you need to tackle a big challenge like FORCEnet. That's been the power of the alignment effort of the last several years — the ability to work the horizontal issues across the organization to deliver, at the end of the day, a FORCEnet capability and not just a 'series of boxes.'

CHIPS: What roles do the SPAWAR Space Field Activity and National Reconnaissance Organization Group play at the enterprise level?

Rear Adm. Slaght: The Space Field Activity and the NRO Group are part of that functional product line, the vertical piece that addresses the space piece of building FORCEnet. They are the whole reason we have the name 'space' in Space and Naval War-

fare Systems Command. They are the connection, not only for us, but more importantly for the Navy, into space. We recognize that space has tremendous capability for us today and into the future. It is very important for us to be engaged in all fronts for how space is going to support us and help us perform our mission in the future.

The Space Field Activity, which is basically integrated into the NRO, is that connection where we connect the dots within the Navy into space. We have most recently stood up PEO Space Systems, and it is responsible for the MUOS (Mobile User Objective System) program, which is the next generation of narrowband satellites. MUOS will consist of a space segment and multiple ground segments. These segments will provide the communications medium and services for all users. Space and ground segments will include a network of advanced narrowband satellites and the ground infrastructure necessary to manage the information network, control the satellites and interface with other systems of the Global Information Grid.

CHIPS: The first FORCEnet Engineering Conference generated phenomenal energy. The buzz in the working and general sessions was indicative of the huge success of the conference.

Rear Adm. Slaght: This conference is one of the tools that will help take the team down the field. It got industry, OPNAV and the fleet together in the room. The reason we held it in Norfolk, Va., was that we wanted to make sure we had fleet involvement. The next one will be held in San Diego, Nov. 15 through 17, so there will be a fleet-centric focus to the conferences. The conferences are designed to get all three parts of that triangle together — the acquisition community, OPNAV and the fleet — in the room with the systems engineers.

I want to emphasize all the words in the title of this conference. It's about FORCEnet, and it's about engineering FORCEnet so there is a lot of technical detail. We want to get people in the room so they can roll up their sleeves, understand the problem, contribute and have a dialogue about the problem, which is why

L-R: Mr. Dennis Bauman, PEO C4I and Space, the Honorable John J. Young Jr., ASN (RDA) and Rear Adm. Slaght.

we think it is appropriate to have two to three days to be able to do this.

I agree with you, the buzz was very positive for the first FORCEnet Engineering Conference. We are working through our feedback to make the next one even better. We are going to hold a conference every six months because this is one of the very important tools you need to have to create the collaborative environment to deliver FORCEnet.

CHIPS: I think one of the key success factors was that the conference attracted fleet operators.

Rear Adm. Slaght: I appreciate that feedback. It was especially great having Vice Admiral Kevin Moran, Commander, Naval Education and Training Command, there. I'm not sure that people had connected the Sea Warrior initiative with FORCEnet. Yet, when you think about it, if we are really thinking net-centric all these initiatives connect in the end. So it was great to see Vice Admiral Moran beginning to brighten light bulbs with all that is going on with Sea Warrior and how much Sea Warrior is going to rely on the connections of FORCEnet to be able to deliver on the Navy Human Capital Strategy. Admiral Moran's presentation was a very powerful element of the conference.

CHIPS: What is the status of the FORCEnet Implementation Baseline?

Rear Adm. Slaght: The FIBL is now institutionalized within the Navy. I'll take that up a notch. On July 14, Secretary Young signed the Department of the Navy Policy for Acquisition Community Support to Implement FORCEnet Capabilities. I think this will be one of the cornerstone documents that is going to take us forward. Keep in mind that we have these three elements of the triangle — OPNAV, the fleet and acquisition community — and each one of those now has a directive, something in writing.

This is important because early on many people kept asking the question, what is FORCEnet? One of the important parts of defining FORCEnet is getting things in writing at the appropriate level, so people can point to how the parts of the Navy enterprise define FORCEnet and intend to implement it.

So each of the elements in the triangle now have a defining document for FORCEnet, starting with the fleet and NETWARCOM. NETWARCOM issued the FORCEnet conceptual document, which defines the operational framework for FORCEnet in the future. OPNAV has created what it calls the FORCEnet check-off compliance list, which it will use as it develops the NCDP, the Naval Capability Development Process that is going to feed the POM.

OPNAV is using that compliance check-off list to certify systems from an operational and, to some extent, technical view so that there is a screen that says if the Navy is going to implement and fund these programs in the future that they fit the bill for FORCEnet compliance. For those of us on the acquisition side, the most important one is the document that Secretary Young signed in July. That document, put together by his chief engineer Carl Siel, gets into the detail that will help us define our work plan for the next several years, maybe even longer, to take FORCEnet forward.

There is specific direction in that document for the FORCEnet Chief Engineer, which is SPAWAR. Specifically, the document says, 'In collaboration with ASN (RDA) CHENG, Marine Corps Systems Command and other stakeholders, the FORCEnet chief engineer will develop and manage the FORCEnet database and associated processes ensuring efficiency, effectiveness and minimal workload on the program managers.'

The FIBL is the database that the document refers to, so now we have a tasking to go do it. But there is also a caution there that says this has to be valuable, efficient, and we have to carefully manage it so that it is not another whole series of redundant data calls on the program managers. The FIBL has been institutionalized. We are ready to take it to the next level, which is to baseline FORCEnet for the future, which will then become a valuable authoritative data set to be used by the Secretary as he goes through milestone reviews. It will feed the NCDP and the FORCEnet compliance part that OPNAV will use as it develops the POM cycle.

It will truly become the authoritative database and, if we do it right, not only will it start to answer Navy questions about the

capabilities that are going to comprise FORCEnet, but then we can start to feed it into OSD and the joint arena to answer GIG compliance questions.

CHIPS: How have the requirements for FORCEnet been gathered?

Rear Adm. Slaght: This is a very intricate dance that takes place between NETWARCOM and OPNAV. Going back to the triangle, NETWARCOM, as the fleet representative for FORCEnet, sets the stage for requirements and priorities, and they work closely with OPNAV to create the roadmap for those requirements and priorities. As that is developed, it helps prioritize what we need to evaluate as part of the NCDP, so we collect the data and evaluate each of the elements of FORCEnet.

We can look at projecting capabilities into the future like space-based radars. As these technologies evolve into the future, we ask how many nodes and what kind of packages should the Navy request the Air Force to put up in the sky, so we can perform our mission of maritime domain awareness, i.e., keeping track of all maritime shipping worldwide as part of the global war on terror. That intricate synchronization has to take place between the fleet and fleet sponsors.

The other aspect is the Sea Trial process led by NETWARCOM in the FORCEnet arena and driven by the fleet commanders and the Naval Warfare Development Command. Using Sea Trial to experiment and prototype capabilities from industry, putting these in the hands of the warfighter and getting warfighter feedback, then using real data from that process helps us quantify which capabilities we should accelerate and support. The key challenge is the golden rule that has not changed: There are not infinite resources to create each of the pillars of Sea Power 21, including FORCEnet. You have to measure and compare across all the warfighting capabilities to decide what is the right balance, what is the right mix.

OPNAV has brought in a number of modeling tools that has allowed us, for the first time, to balance the right mix across Navy resources. How many nodes to the network do we need, i.e., planes, ships, submarines, and how much of the network do we need to protect. So when the POM is created, we have maximized the spread of our limited resources to the maximum extent possible. That is the real key to how the information is gathered and validated making sure that each of the principals — the fleet, OPNAV and the acquisition community — have input. Then input is rolled into a modeling process to compare. As we used to say in the old days, how do you measure a pound of C4I? I think we have truly gotten our hands around that for the first time.

CHIPS: How would you rate the importance of business IT to the success of FORCEnet?

Rear Adm. Slaght: I think it is absolutely critical. From day one, we have talked about a FORCEnet continuum. I would describe it this way: There is a business end to FORCEnet. I don't think our early thinking about FORCEnet really addressed this; it was always about warfighting systems and C4I at sea. But business IT and tactical systems are all very intricately interrelated. For

example, the Sea Warrior piece that we talked about earlier with Vice Admiral Moran is a great example of that business IT part. It literally impacts the Navy's ability to perform its mission by using FORCEnet tools to help evolve the warfighter in conjunction with the Human Capital Strategy in real-time in terms of where we want to be in the future.

So the business end of FORCEnet — the infrastructure, NMCI, and all the software systems that train and educate our Sailors, pay our Sailors, and the logistics that support the warfighting systems — all those business elements are going to be an integral part of FORCEnet in the future. FORCEnet has to be a universal network. There may be subsets and layers, but in the end the goal is this global network, the GIG. We should all be marching toward this goal.

There is another end of the continuum from business to the more pointed end of the spear and warfighting, and that is the combat systems. This will be another challenge for FORCEnet in the future. How do we align and integrate across the warfighting systems, literally into fire control loops. There is a significant effort going on right now in the combat systems arena called open architecture. I think originally when FORCEnet was defined people just equated it to C4I. It is much broader than that from a technical view; it includes business systems and combat systems to some extent. It's a Venn diagram; it doesn't include all combat systems, but it certainly includes a great part of them.

Keep in mind that the center of FORCEnet is the warfighter. It's not unlike what Vice Admiral Jerry Tuttle came up with when we started to evolve C4I when he talked about the construct of Copernicus that put the warfighter in the center of the universe. This is another step in that direction that keeps us focused on keeping the warfighter in the center of this equation. That is the reason why when the acronym was created for FORCEnet, the 'n' for the network has always been a small n because it's not so much about the technology as it is about the warfighter.

CHIPS: Any predictions for the future of C4I?

Rear Adm. Slaght: Without question C4I is a critical area that will continue to grow for the Navy, DoD and this nation. We're starting to connect more and more to homeland defense and security. So as the Navy wrestles with the Quadrennial Defense Review and the global war on terror, in addition to major combat operations and balancing force posture to achieve success, there's incredible leverage you get from this capability we call FORCEnet.

CHIPS: Any predictions for the future of Ken Slaght, Rear Admiral, U.S. Navy (retired)?

Rear Adm. Slaght: Well, it's been an incredible ride, an incredible journey. I hope to continue to contribute in some way, maybe on the industry side of the equation. I really find this business extraordinarily rewarding with lots of challenges to be addressed. I would like to continue to contribute in some way because it's one of the most important things we're doing for the Navy and this nation. CHIPS